

ABSTRACT

Remote activation mechanism for equipment hold down and release, composed of a fixed base (1); a disk with capacity to rotate (2); a ring (3) subdivided in 5 independent segments; a helical torsion spring (4) mounted around the segmented, being in one end joined to the fixed base (1) and the other end to the disk (2); a retainer (5) to attach the hardware, that passes through the fixed base (1) and has means to be blocked by the 10 segmented ring (3); a disk blocking system; and a disk liberation system (2). The disk (2) can potentially rotate from a position in which the helical torsion spring (4) is loaded hugging radially the segmented ring (3), up to a position in which the helical torsion spring 15 (4) is unloaded, allowing the ring segments move radially away to release the retainer (5). The disk blocking system can be based on rollers or balls (12) with possibility of being inserted partially in disk grooves or in crown grooves. The disk (2) liberation system 20 consists of an actuator that can be based on the use of shape memory alloy wire.

FIG. 2.